

Title (en)

METHOD FOR DETERMINING THE DENSITY OF A GAS

Title (de)

VERFAHREN ZUR BESTIMMUNG DER DICHTE EINES GASES

Title (fr)

PROCEDE POUR DETERMINER LA MASSE VOLUMIQUE D'UN GAZ

Publication

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Application

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Abstract (en)

[origin: FR2765966A1] The invention concerns a method for determining the density of a gas consisting in: filling a chamber (12) capable of sustaining the pressure without noticeable deformation with a gas whereof the density is to be determined and providing an initial pressure P_1 higher than normal atmospheric pressure, by pressurised supply means (20); allowing said gas to escape through purging means (30) provided with a sonic nozzle (40), and measuring the time Δt taken by the gas to pass, inside the chamber (12), from a first pressure P_1 not higher than the initial pressure P_1 , to a second pressure P_2 lower than said initial pressure P_1 ; computing the density ρ of the gas being analysed using a general theoretical formula stored in a computer (60) memory and including said measured time Δt and the gas temperature T , and a constant k obtained by the calibrating computer calibration (60) on the basis of a reference gas whereof the density is known.

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